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Docket No.: 500.43089X00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:

Hidetaka SASAKI et al.

Serial No.   10/649,698

Filed: August 28, 2003

For: METHOD AND PROGRAM FOR MONITORING EXECUTION
            STATE OF PROGRAM

June 10, 2005

SUPPLEMENTAL PETITION TO MAKE SPECIAL
UNDER 37 CFR §1.102(MPEP §708.02)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Supplemental to the Petition to Make Special filed on April 5, 2005,

Applicants submit the following additional remarks.

It is submitted that the cited references, whether considered alone or in

combination, fail to disclose or suggest the invention as claimed. In particular,

the cited references, at a minimum, fail to disclose or suggest in combination with

the other limitations recited in the claims:

a first feature of the present invention as recited in claim 1 wherein if the

condition is not satisfied, modifying the interval of the item belonging to a group

linked to the compared item and stored in the storage device to a value smaller

than the interval, and modifying the interval of at least one of the items not

belonging to said group to a value greater than the interval;

a second feature of the present invention as recited in independent claim 4 recites if the condition is not satisfied, modifying the interval of each item linked to the compared item to a value smaller than the interval, and if the value of the item associated with the computer load is different from the condition linked to the item and stored in the storage device, modifying the interval of at least one of the items associated with the program execution state and having an interval not smaller than the initial value linked to the item and stored in the storage device to a greater value than the interval;

a third feature of the present invention as recited in independent claim 6 recites wherein when the condition is not satisfied and the value of the item associated with the computer load satisfies the condition linked to the item and stored in the storage device, modifying the interval of the respective items linked to the compared one item to a smaller value than the interval;

a fourth feature of the present invention as recited in independent claim 9 wherein when the condition is not satisfied and the number of items related to the item compared is equal to or smaller than a predetermined value, modifying the interval of the respective items related to the compared one item to a smaller value than the interval;

a fifth feature of the present invention as recited in independent claim 10 wherein when one of the plurality of items does not satisfy the condition related to the item and stored in the storage device and there is a group related to an item different from the one item and including items whose intervals are smaller than the initial value set for the intervals, modifying the intervals of the respective

items to the initial values, and modifying the interval of each of the items belonging to the group related to the one item to a value smaller than the interval

a sixth feature as recited in independent claim 11 including modifying the interval related to the extracted item related to the one item and stored in the storage device to an interval smaller than the interval stored by said one computer or another computer different from it, and modifying the interval related to the extracted item not related to the one item and stored in the storage device to an interval greater than the interval stored by said one computer or another computer different from it;

a seventh feature as recited in independent claim 12 wherein if the condition is not satisfied, modifying the interval of the respective items related to the compared item to a value smaller than the interval, and modifying the interval of at least one of the items different from the aforementioned items related to the compared item to a value greater than the interval;

an eighth feature as recited in independent claim 14 wherein if the condition is not satisfied, modifying the interval of each item related to the compared item to a value smaller than the interval, and if the value of the item associated with the computer load is different from the condition related to the item and stored in the storage device, modifying the interval of at least one of the items associated with the program execution state and having an interval not smaller than the initial value related to the item and stored in the storage device to a greater value than the interval;

a ninth feature as recited in independent claim 16 including comparing a value of one of the plurality of items to a condition stored in the storage device, and when the condition is not satisfied and the value of the item associated with the computer load satisfies the condition related to the item and stored in the storage device, modifying the interval of the respective items related to the compared one item to a smaller value than the interval;

a tenth feature as recited in independent claim 19 including comparing a value of one of the items among the plurality of items to a condition stored in the storage device, and when the condition is not satisfied and the number of items related to the item compared is equal to or smaller than a predetermined value, modifying the interval of the respective items related to the compared one item to a smaller value than the interval; and

an eleventh feature as recited in independent claim 20 wherein when one of the plurality of items does not satisfy the condition related to the item and stored in the storage device and there is a group related to an item different from the one item and including items whose intervals are smaller than the initial value set for the intervals, modifying the intervals of the respective items to the initial values, and modifying the interval of each of the items belonging to the group related to the one item to a value smaller than the interval.

The references considered most closely related to the claimed invention are briefly discussed below:

U.S. Patent No. 5,537,595 (Sakata) discloses a device management system in a computer system comprising a unit for measuring a load condition of a device such as a real memory to be managed. A unit is also included for determining a management period such as an update period of a real page in a real memory in accordance with the load condition, such as an unreference interval count (UIC) of the real page. The management period is determined such that, the larger the value of the load condition is, the shorter the management period, or the larger the UIC of the real is, the longer the update period. Since the management period is changed in accordance with the load condition of the device to be managed, management of devices is thereby accomplished with a lesser Central Processing Unit (CPU) time. Additionally, the device management system updates a time value for which a real page has not been referenced. However, unlike the present invention, Sakata does not disclose or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claim 4, the above described third feature of the present invention as recited in independent claim 6, the above described fourth feature of the present invention as recited in independent claim 9, the above described fifth feature of the present invention as recited in independent claim 10, the above described sixth feature of the present invention as recited in independent claim 11, the above described seventh feature of the present invention as recited in independent claim 12, the above described eighth feature of the present invention as recited in independent claim 14, the above described ninth feature of

the present invention as recited in independent claim 16, the above described tenth feature of the present invention as recited in independent claim 19, and the above described eleventh feature of the present invention as recited in independent claim 20, in combination with the other limitations recited in each of the independent claims.

U.S. Patent 5,758,189 (Nakada et al.) discloses a host apparatus has examination-period changing means for monitoring the state of use of a data input unit, such as how frequently a user is using the keys on a keyboard, and for changing, in dependence upon the monitored state of use, a period at which a check is performed to determine whether a recording medium has been loaded in an external storage unit and medium-loading monitoring means for performing the check, at the checking period decided. The examination-period changing means lengthens the checking period if frequency of use of the data input unit is high and shortens the checking period if frequency of use is low. In a case where a plurality of external storage units have been connected to the computer system, the checking of medium loading is executed only with regard to external storage units in which a recording medium has not been loaded. The host apparatus executes predetermined processing upon detecting that a recording medium has been loaded in an external storage unit. However, unlike the present invention, Nakada et al. does not disclose or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claim 4, the above described third feature of the present invention

as recited in independent claim 6, the above described fourth feature of the present invention as recited in independent claim 9, the above described fifth feature of the present invention as recited in independent claim 10, the above described sixth feature of the present invention as recited in independent claim 11, the above described seventh feature of the present invention as recited in independent claim 12, the above described eighth feature of the present invention as recited in independent claim 14, the above described ninth feature of the present invention as recited in independent claim 16, the above described tenth feature of the present invention as recited in independent claim 19, and the above described eleventh feature of the present invention as recited in independent claim 20, in combination with the other limitations recited in each of the independent claims.

U.S. Patent No. 6,223,201 B1 (Reznak) discloses a data processing system and method of task management within a self-managing application program including a number of tasks and a processing time monitor are disclosed. In accordance with the present invention, a selected portion of processing time is allocated to each of the tasks in the self-managing application and the tasks are executed by the data processing system. Utilizing the processing time monitor, a determination is periodically made whether an actual portion of processing time utilized by each of the tasks exceeds the selected portion of processing time allocated to that task. In response to a determination that an actual portion of processing time utilized by a particular task exceeds the selected portion of processing time allocated that task, execution of the particular

task is suspended for a selected penalty time. In one embodiment, the penalty time is selected such that following the expiration of the penalty time, the actual portion of processing time utilized by the particular task will be no greater than the selected portion of processing time allocated to the particular task. However, unlike the present invention, Reznak does not disclose or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claim 4, the above described third feature of the present invention as recited in independent claim 6, the above described fourth feature of the present invention as recited in independent claim 9, the above described fifth feature of the present invention as recited in independent claim 10, the above described sixth feature of the present invention as recited in independent claim 11, the above described seventh feature of the present invention as recited in independent claim 12, the above described eighth feature of the present invention as recited in independent claim 14, the above described ninth feature of the present invention as recited in independent claim 16, the above described tenth feature of the present invention as recited in independent claim 19, and the above described eleventh feature of the present invention as recited in independent claim 20, in combination with the other limitations recited in each of the independent claims.

U.S. Patent No. 6,438,551 B1 (Holmskär) discloses to keep control of all relevant events in a real-time communication system, there is proposed a load regulation method for a central unit in this real-time communication system such

that at least one job is submitted to a job buffer means (18) providing a pre-specified storage capacity. Further, jobs stored in the buffer means (18) are submitted to a processing means (22) for further processing. According to the invention, the available storage capacity of the buffer means (19) is updated dynamically according to the actually used job buffer capacity after each load regulation interval. Thus it is possible, to keep control of all major events and processes within the real-time communication system. However, unlike the present invention, Holmskär does not disclose or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claim 4, the above described third feature of the present invention as recited in independent claim 6, the above described fourth feature of the present invention as recited in independent claim 9, the above described fifth feature of the present invention as recited in independent claim 10, the above described sixth feature of the present invention as recited in independent claim 11, the above described seventh feature of the present invention as recited in independent claim 12, the above described eighth feature of the present invention as recited in independent claim 14, the above described ninth feature of the present invention as recited in independent claim 16, the above described tenth feature of the present invention as recited in independent claim 19, and the above described eleventh feature of the present invention as recited in independent claim 20, in combination with the other limitations recited in each of the independent claims.

U.S. Patent Publication No. 2004/0193827 A1 (Mogi et al.) in a computer system with a DBMS running thereon, management of the performance of a storage apparatus is executed by using a performance indicator provided by a user job so as to simplify the management of the performance. For this reason, a management server employed in the computer system monitors an operating state of each system element, a response time onto a job and other information. Pre-given information on a process such as a performance requirement the collected monitored information are used by the management server in issuing a command to change allocation of a processing amount to a port, an allocation of a cache area for data, the logical configuration of disc drives and other parameters in order to carry out the new process or in the case where a result of a judgment based on the monitored information indicates that tuning is necessary. In the case of a process for a batch job, a method for estimating a processing time is given to the management server, which issues a setting modification command based on an estimated processing time. In the case of a process for an on-line job, on the other hand, a command to modify settings of a member bearing a heavy load is issued in the case where a response time on a process and/or a throughput do not meet their performance requirement. However, unlike the present invention, Mogi et al. does not disclose or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claim 4, the above described third feature of the present invention as recited in independent claim 6, the above

described fourth feature of the present invention as recited in independent claim 9, the above described fifth feature of the present invention as recited in independent claim 10, the above described sixth feature of the present invention as recited in independent claim 11, the above described seventh feature of the present invention as recited in independent claim 12, the above described eighth feature of the present invention as recited in independent claim 14, the above described ninth feature of the present invention as recited in independent claim 16, the above described tenth feature of the present invention as recited in independent claim 19, and the above described eleventh feature of the present invention as recited in independent claim 20, in combination with the other limitations recited in each of the independent claims.

Therefore, since the references fail to disclose or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claim 4, the above described third feature of the present invention as recited in independent claim 6, the above described fourth feature of the present invention as recited in independent claim 9, the above described fifth feature of the present invention as recited in independent claim 10, the above described sixth feature of the present invention as recited in independent claim 11, the above described seventh feature of the present invention as recited in independent claim 12, the above described eighth feature of the present invention as recited in independent claim 14, the above described ninth feature of the present invention as recited in independent claim 16, the above described

tenth feature of the present invention as recited in independent claim 19, and the above described eleventh feature of the present invention as recited in independent claim 20, in combination with the other limitations recited in each of the independent claims, it is submitted that all of the claims are patentable over the cited references.

In view of the foregoing, Applicant requests that this Petition to Make Special be granted and that the application undergo the accelerated examination procedure set forth in MPEP 708.02 VIII.

Respectfully submitted,

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